

The Frequency of Contacting Persons you Dreamed About: A Social Aspect of Dreaming

Imagination, Cognition and
Personality: Consciousness in
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Practice

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Abstract

Although dreams are very private, dreaming has also social components, i.e., dreams are shared quite often. We studied the frequency of how often the dreamer deliberately contacted another person because s/he dreamed about this person, as this might intensify the waking-life bonds with this person. Overall, 2929 participants completed the dream survey, and a subsample also completed a Big Five Personality inventory. The findings indicate that 37% of the participants contacted other persons because they dreamed about them. Dream recall frequency, attitude towards dreaming, younger age, and female gender was associated with contacting the person(s) dreamed of. Moreover, extraversion was also related to the frequency of contacting the person(s) dreamed of – similar to the relationship found for dream sharing frequency and extraversion. However, the association with low conscientiousness is a new finding. It would be very interesting to test whether this social behavior (contacting another person) motivated by dreams strengthens the social bonds between the dreamer and the contacted person(s) and thereby provide support for the Social Simulation Theory.

Keywords

social aspects of dreaming, dream recall frequency, attitude towards dreaming, extraversion, conscientiousness

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Introduction

Dreaming can be defined as subjective experiences during sleep (Schredl, 2018) and, thus, are very private – only available to the dreamer himself/herself if s/he is able to remember the dream upon awakening. Despite the private nature of the dream experience, dreaming also has social components: dreams are shared in a wide variety of cultures (Curci & Rime, 2008; Heijnen, 2001; Mageo, 2004; Morgan, 2014; Schredl & Bulkeley, 2019; Schredl et al., 2015b; Szmigielska & Holda, 2007; Tedlock, 1999; Wax, 2004). In the sample of Schredl and Schawinski (2010) that consisted mainly of psychology students, about 14.5% of all remembered dreams were shared. Dream sharing frequency was related to trait empathy (Blagrove et al., 2019) and listening to a dream shared by the dreamer can increase state empathy or the feeling of closeness with the dreamer (Blagrove et al., 2019; Schredl, Fröhlich, et al., 2015b). Duffey et al. (2004) showed that regular dream sharing without interpreting dreams can increase relationship intimacy in couples. I.e., dream sharing plays a part in social life. Recently, the Social Simulation Theory (SST) has been proposed (Revonsuo et al., 2015). The basic idea is that “the function of social simulation in dreams is to maintain and strengthen the dreamer’s most important social bonds from waking life.” (Revonsuo et al., 2015, p. 21) The so-called Sociality Bias – a proposition of the SST – is based on findings showing that social interactions play a more prominent role in dreams compared to waking reports (Tuominen et al., 2019). Schredl and Hofmann (2003) showed that social activities in dreams were more prominent in dreams compared to “cognitive” activities (reading, writing, working with computers) even though the students spent more time during the day with these cognitive activities compared to social activities like meeting with friends. Although the importance of social interactions in dreams have been well-documented (Domhoff, 1996; Hall & Van de Castle, 1966; Paul & Schredl, 2012), systematic studies supporting the hypothesis that dreaming about social interactions improve social skills (“Practice and Preparation hypothesis” and “Strengthening hypothesis “within the framework of the Social Simulation Theory) are still lacking (Tuominen, Stenberg, et al., 2019).

In addition to dream sharing and dreaming about social interactions, there is a third area in which dreams have an impact on the social life of the dreamer, that is, deliberately seeking contact with a person because the dreamer dreamed about him or her. This would also fit in the framework of the Social Simulation Theory, i.e., dreams serve as motivator to strengthen social bonds; although this aspect has not been mentioned by the group proposing the Social Simulation Theory (Revonsuo et al., 2015; Tuominen et al., 2019). So far, only two studies with relative small sample sizes of $N = 168$ and $N = 85$ (Kuiken & Sikora, 1993; Schredl, 2000) systematically investigated the frequency of this behavior. About 31% to 39% of the participants did contact other persons twice or more often per year because of dreaming about them; the figure regarding doing this once per month or more often varied between 7% and 16% (Kuiken & Sikora, 1993; Schredl, 2000). The positive correlation between

the frequency of contacting another person due to a dream and dream recall frequency seems very plausible as recalling dreams is a necessary prerequisite for this behavior (Schredl, 2000). Women tend more often to seek contact to other persons due to dreaming about them than men but this gender difference was no longer present if dream recall frequency – which is also higher in women (Schredl & Reinhard, 2008) – was statistically controlled (Schredl, 2000). It is not known whether seeking contact to a person due to a dream is related to personality, e.g., extraversion – but a relationship between extraversion and dream sharing frequency has been reported (Schredl et al., 2016; Schredl & Schawinski, 2010).

The present study aims to determine the frequency of deliberately seeking contact to a person because one dreamed of this person based on a large sample with a heterogeneous background (age range, different education levels). It was expected that dream recall frequency was positively correlated with the frequency of this behavior. Moreover, we expected a positive relationship between seeking contact to a person dreamed of and extraversion, as extraverted individuals are more comfortable in initiating social interactions irrespective of the motivation (Shirayev, 2017).

Method

Participants

Overall, 2929 persons participated in the study (1742 women, 1187 men) with the mean age of 45.88 ± 14.38 years. Educational levels were distributed as follows: 25 participants did not finish school, 314 went to school for 9 years (“Hauptschule”), 848 for 10 years (“Mittlere Reife”), 829 for 12–13 years (“(Fach-)Hochschulreife”), 839 for 16–18 years (“(Fach)Hochschulstudium”) and 74 participants had doctoral degrees. The subgroup that completed the Big Five personality questionnaire consisted of 1711 participants (1437 woman, 1055 men) with a mean age of 47.80 ± 14.19 years (range: 17 to 92 years).

Research Instrument

Dream recall frequency was measured with a seven-point scale (coded as 0 = never, 1 = less than once a month, 2 = about once a month, 3 = about 2 to 3 times a month, 4 = about once a week, 5 = several times a week, 6 = almost every morning) with a high retest reliability ($r = .756$; Schredl et al., 2014).

The attitude towards dreams was measured by six items (Schredl et al., 2014), e.g., “I think that dreaming is in general a very interesting phenomenon.” or “I want to know more about dreams.” The items have a five-point format assessing the agreement with the statements (0 = not at all, 1 = not that much, 2 = partly, 3 = somewhat, 4 = totally). The internal consistency (Cronbach’s $\alpha = 0.910$) and the retest reliability over a two-week interval ($r = 0.842$) were high (Schredl et al., 2014).

The item “How often do you get in touch with people on purpose because you have dreamed about them?” included eight response options (0 = never, 1 = less than once a year, 2 = about once a year, 3 = about two to four times a year, 4 = about once a month, 5 = two to three times a month, 6 = about once a week, 7 = several times a week). The retest reliability for a two-week interval ($N = 2298$) was $r = 0.667$ (unpublished data).

The big five personality factors were measured with the German version of the NEO-FFI-30, which includes 30 Items (Körner, Drapeau, et al., 2008a). Each personality factor (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) were computed as the sum score of the six corresponding items. The internal consistencies (Cronbach’s alpha) of the five scales of the 30 item version were comparable to those of the 60 item version of the NEO-FFI and ranged from $r = 0.67$ (openness to experience) to $r = 0.81$ (neuroticism) (Körner, Geyer, et al., 2008b).

Procedure

The link for the study was sent to all members (about 10,000 at that time) registered within the online panel (www.wisopanel.net). All participants that responded from April 18th, 2014 to April 29th, 2014 were included. This panel consists of German speaking persons who are interested in online studies with heterogenic demographic backgrounds. For some studies they receive a reward such as money. However, participating in this study was voluntary and unpaid. As stated above, a subgroup of 1711 participants (1437 woman, 1055 men) completed the personality questionnaire about one year later, between March 23, 2015 and April 8, 2015. The mean age of this subsample was 47.80 ± 14.19 years (range: 17 to 92 years).

The SAS 9.4 software package for Windows (SAS Institute, Cary, North Carolina, USA) was used for statistical analyses. To analyze the effect of socio-demographic, dream, and personality variables on the frequency of contacting persons the participant dreamed about ordinal regressions (cumulative logit analyses) were applied. Ordinal regressions were used because the measurement level of the dependent variable “frequency of contacting persons the dreamer dreamed about” is ordinal. Effect sizes for each variable included in the ordinal regression were computed using Chi-Square values according to formula given by Cohen (1988).

Results

The distribution of dream recall frequencies is depicted in Table 1. Most of the participants (almost 60%) remember dreams at least once a week. The mean value for the six-item attitude towards dreams measure was 2.48 ± 0.92 . The percentage of persons with no dream recall is low. In Table 2, the frequency of contacting a person because one had dreamed about her or him is shown. About 6% of the participants contacted persons due to dreaming about them once a month or more often;

Table 1. Dream Recall Frequency (N = 2929).

Category	Frequency	Percent
Almost every morning	313	10.69%
Several times a week	845	28.85%
About once a week	563	19.22%
About 2 to 3 times a month	422	14.41%
About once a month	223	7.61%
Less than once a month	379	12.94%
Never	184	6.28%

Table 2. Frequency of Contacting Persons the Dreamer Dreamed About and Dream Sharing Frequency (N = 2929).

Category	Frequency of contacting persons		Dream sharing frequency	
	Frequency	Percent	Frequency	Percent
Several times a week	14	0.48%	97	3.31%
About once a week	35	1.19%	213	7.27%
Two or three times a month	46	1.57%	306	10.45%
About once a month	76	2.59%	449	15.33%
About two or four times a year	241	8.25%	641	21.88%
About once a year	225	7.68%	260	8.88%
Less than once a year	456	15.57%	405	13.83%
Never	1836	62.68%	558	19.05%

the majority of the participants never contacted a person they had dreamed about. Nevertheless, about 31% did get in touch with people on purpose because they have dreamed about them. Dream sharing was much more frequent than seeking contact to a person dreamed of (see Table 2); the Wilcoxon test was significant ($z = 38.5$, $p < 0.0001$, effect size = 2.024). However, the frequency of seeking contact was related to dream sharing frequency – even after partialling out dream recall frequency and attitude towards dreaming: $r = 0.281$ ($p < 0.0001$).

The strongest factors related to the frequency of contacting persons due to dreaming of them were dream recall frequency and positive attitude towards dreams (see Table 3). Moreover, the frequency of contacting persons decreased with age. A small but significant gender difference was also found with women tending to contact persons they dreamed about more often. Education was not related to this variable.

The means of the five personality dimensions were as follows: Neuroticism 1.34 ± 0.91 (N = 1711), extraversion 2.10 ± 0.66 (N = 1708), openness to experience $2.43 \pm$

Table 3. Ordinal Regression for the Frequency of Contacting Persons the Dreamer Dreamed About (N = 2929).

	SE	χ^2	p-value	Effect size
Age	-0.1547	46.7	<0.0001	0.255
Gender	0.0649	8.2	0.0042	0.106
Education	0.0179	0.7	0.4194	0.031
Dream recall frequency	0.2485	95.6	<0.0001	0.367
Attitude towards dreams	0.3388	161.4	<0.0001	0.483

SE = Standardized estimates.

Table 4. Ordinal Regression for the Frequency of Contacting Persons the Dreamer Dreamed About (N = 1703).

	SE	χ^2	p-value	Effect size
Age	-0.1609	26.8	<0.0001	0.253
Gender	0.0613	3.8	0.0482	0.096
Education	0.0094	0.1	0.7557	0.015
Dream recall frequency	0.2462	51.0	<0.0001	0.351
Attitude towards dreams	0.3347	77.7	<0.0001	0.437
Neuroticism	0.0328	0.9	0.3554	0.046
Extraversion	0.1366	17.9	<0.0001	0.206
Openness to experience	0.0154	0.2	0.6343	0.022
Agreeableness	-0.0511	2.6	0.1057	0.078
Conscientiousness	-0.1378	18.1	<0.0001	0.207

SE = Standardized estimates.

0.74 (N = 1709), agreeableness 2.88 ± 0.66 (N = 1708), and conscientiousness 2.97 ± 0.60 (N = 1711).

Introducing the five personality factors into the regression analysis simultaneously did not alter the strength of association for age, gender, dream recall frequency, and positive attitude towards dreams in a substantial way, i.e., the effect sizes are almost identical (see Table 4). Nevertheless, two personality traits (extraversion and low conscientiousness) were related to the frequency of contacting a person the participant dreamed about. Neuroticism, openness to experience, and agreeableness were not related.

Discussion

The present study showed that 37% of the participants contacted other persons because they dreamed about them; this figure is comparable to previous findings (Kuiken &

Sikora, 1993; Schredl, 2000). As expected dream recall frequency was associated with contacting other persons dreamed about and we could also show that positive attitude towards dreams was also related. Moreover, extraversion was related to the frequency of contacting other persons dreamed of – similar to the relationship between extraversion and dream sharing frequency (Schredl et al., 2016; Schredl & Schawinski, 2010). However, the association with low conscientiousness is a new finding.

The major methodological issue that has to be addressed is the sample selection. First, participants registered if they are interested in online studies and, second, a subgroup elected to participate in this dream study resulting in a sample that showed considerably higher dream recall compared to representative samples (Schredl et al., 2014). That is, the percentages of individuals who contacted other persons because they dreamed about them should be lower in representative samples – as there are more persons (about 31%) who do not recall dreams at all and, thus, could not act on dreams about other persons. In the present study, the percentage of participants who don't recall dreams was low (about 6%). In order to control for the dream recall effect, we controlled this effect in the regression analysis. Previous studies (Hess et al., 2017; Schredl et al., 2014; Schredl & Göritz, 2017, 2019a) clearly indicate that association patterns between dream variables and other variables like age, gender, and personality are very likely not affected by the sampling bias (overrepresentation of high recallers) as the variance of the variable like age, educational background, and even dream recall frequency is still large.

Another methodological issue is the retrospective measurement, as this could be biased by memory capabilities. On the other hand, a prospective study including dream diaries and reports of contacting persons because the dreamer dreamed about them would be very laborious for the participants as only about 6% of the present sample reported such an incidence occurring once a month or more often.

A substantial number of participants (about 37%) have contacted another person because they dreamed of her or him at least once; the percentage of doing that frequently is very low (about 3%). Putting that in perspective, this behavior occurs much rarer than sharing dreams, i.e., the motive to share the dream with the person because the dreamer dreamed about him or her is a minor one; several studies (Ijams & Miller, 2000; Olsen et al., 2013; Vann & Alperstein, 2000) indicated that entertainment, letting the listener know what is happening in the narrators mind, learning more about the meaning of the dream, and relief (in the case of nightmares) were the main motives for sharing dreams. The significant correlation between dream sharing frequency and frequency of contacting a person one dreamed about indicates that dreaming about someone might also be a motive for dream sharing if – as we assume – the dreamer is telling the person about his or her dream that included the other person.

Whereas the correlation between dream recall frequency and the frequency of contacting persons one has dreamed about is obvious – as you can only do that if you remember at least some dreams, the newly reported relationship between attitude

towards dreams and contacting persons dreamed of is more intriguing. One might speculate if eliciting and analyzing the dream reports that feature the other person(s), i.e., the context in which the other person occurred in the dream, might help to explain this relationship. For example, it has been reported that individuals contacted the other persons because they dreamed that something bad happened to this person (Ryback & Sweitzer, 1989). A belief in precognitive dreams might stimulate the dreamer to call a person to reassure himself/herself that nothing had happened. A previous study (Schredl, 2009) showed that a positive attitude towards dreams is linked with reporting more often precognitive dreams. On the other hand, a participant in the study of Schredl and Erlacher (2007) reported the following: "I dreamed of a girl from my school on whom I had a crush. This dream motivated me to approach her." The study of Olsen et al. (2020) showed that persons with a positive attitude towards dreams were more likely to act on their dreams, e.g., making decisions. In both cases, the dream itself might not be shared (see above) but the attitude that dreams might reflect worries and emotional relevant waking-life topics might have made the difference. In a future study, eliciting accounts of dreams that stimulated to dreamer to seek contact to the person s/he dreamed about would help to clarify possible connections between attitude towards dreams and contacting the person.

The hypothesis that extraversion is related to the frequency of contacting persons dreamed of was confirmed. This seems plausible as extraverted individuals are talkative, outgoing, and seek new social contacts in general (Shirayev, 2017), i.e., carrying out contacting a person because of a dream is facilitated if one is extraverted. The correlation between low conscientiousness and the frequency of contacting persons dreamed of is less easy to understand as dream sharing frequency is not related to this personality trait (Schredl et al., 2016; Schredl & Schawinski, 2010). However, low conscientiousness is also related to the frequency of recording dreams (Schredl & Göritz, 2019b). Since high conscientiousness is related to professional achievement, career and so on (Shirayev, 2017), one might speculate that individuals with low conscientiousness pay more attention to topics that are not closely related to professional issues and, for example, take their dreams more seriously by recording them or acting on a dream such as contacting the person they dreamed about. Again, eliciting the dream reports that include the context the contacted person within the dream would be helpful to understand the relationship between low conscientiousness and contacting a person dreamed of.

Age and gender were also related to the frequency of contacting persons dreamed about; younger persons and women were more likely to do that than older persons and men. It would be interesting to study factors that might explain these relationships, e.g., the size of the social network might be smaller in older adults compared to younger adults (Ajrouch, Blandon, & Antonucci, 2005) or gender-specific dream socialization with girls and women tending to take dreams more seriously than men. (Schredl et al., 2015a)

To summarize, the findings indicated that one social aspect of dreaming is that the dreamer deliberately seeks contact to the person s/he dreamed about. Although this behavior is less frequent than dream sharing, it would be – in view of the Social Simulation Theory (Revonsuo et al., 2015) – interesting to study whether contacting the person also intensifies the social bond between dreamer and this person.

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